

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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IN THE MATTER OF THE POWER)
COST ADJUSTMENT (PCA) ANNUAL)
RATE ADJUSTMENT FILING OF)
AVISTA CORPORATION.)

CASE NO. AVU-E-14-06

COMMENTS OF THE
SIERRA CLUB

IDAHO PUBLIC
UTILITIES COMMISSION

IDAHO CONSERVATION LEAGUE
MONTANA ENVIRONMENTAL
INFORMATION CENTER

The Sierra Club, the Idaho Conservation League (ICL), and Montana Environmental Information Center (MEIC) submit these comments on Avista Corp's 2014 Power Cost Adjustment (PCA). We urge the Commission to disallow the recovery of the extraordinary power costs associated with the forced outage of Colstrip Unit 4. We recommend the Commission open a separate docket to investigate whether costs associated with an extended, forced outage of Colstrip Unit 4 in 2013-2014 were reasonable and prudently incurred.

Sierra Club is America's oldest and largest grassroots environmental organization. Sierra Club has 1.4 million members and supporters, with over 2,000 members in Idaho. Founded in 1892, the Sierra Club has been working for over a century to protect communities, wild places, and the planet itself. Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives.

Idaho Conservation League is Idaho's largest state-based conservation organization. We represent 20,000 supporters, many of whom are customers of Avista, who have a strong interest in protecting Idaho's air, land, and water. Ensuring a clean, affordable, and reliable electric system is key to protecting these interests.

MEIC is a 40-year strong environmental advocacy organization with members across the country, including Idaho. MEIC works to protect public health and the environment from air pollution, water pollution and climate change.

Our organizations primary concern in the filing regards the Colstrip coal-fired power plant—located 120 miles east of Billings in southeastern Montana. This plant consists of four generating units collectively owned by Puget Sound Energy, PPL Montana LLC, Portland General Electric, Avista, PacifiCorp, and NorthWestern Energy LLC. Avista owns 15% of each Units 3 and 4, representing a combined total capacity of 222 MW.

In this 2014 PCA filing, Avista seeks authorization to impose on its customers a \$7.6 million surcharge, consisting primarily of a \$ 4.1 million increase over authorized expenses related to Colstrip power generation and fuel.¹ As Avista tersely stated in its direct testimony,

¹ See Johnson Direct Testimony at p. 4. (Because Avista has not made its cost breakdown publicly available, it is unclear whether the \$4.1 million line item for Colstrip includes the costs for replacement power during the 7-month forced outage of Colstrip Unit 4, or whether those costs are reflected elsewhere.)

“Colstrip Unit 4 was unavailable due to a forced outage from July 1, 2013 until January 22, 2014. Colstrip’s incremental generation expense is lower than the wholesale power prices, therefore, replacing Colstrip power led to an increase in power supply expense.”²

However, the process afforded by the PCA mechanism does not afford the public or the Commission with adequate information to assess whether the costs associated with the outage were reasonable. Thus, we urge the Commission to initiate a complete investigation and prudence review before allowing Avista to recover any portion of these extraordinary Colstrip-related expenses from its customers. However, should the Commission consider these expenses in the context of the PCA mechanism, we urge the Commission to nevertheless require a complete accounting of the expenses and adequate justification of their reasonableness, consistent with the Commission’s authority and obligation under Idaho law.

The extended outage of Colstrip Unit 4 in 2013-2014 is only the latest evidence that the Colstrip facility has become unreliable and unreasonably costly to operate. In 2009, Colstrip Unit 4 had a forced outage that lasted more than 6 months and likely increased costs for Avista and other owners. Thus, between 2009 and the present, Colstrip Unit 4 alone was unavailable for more than a year—or approximately 20 percent of the time it was scheduled to operate—due to unplanned, extended outages. Further, as one Commissioner on the Montana Public Service Commission has noted, “the [Colstrip] plant has been uneconomical to run, because of low-price market conditions primarily in the spring and early summer, for another significant period of time.”³ The Montana Commission perspective is especially important because they have extensively reviewed Colstrip costs, operations, and risks.

Allowing Avista to recover the extraordinary costs of such outages through the streamlined PCA mechanism effectively shelters the company’s actions from scrutiny over whether such costs could have been reduced or avoided altogether. And given the seemingly pro-forma approval of utility PCA filings, Avista would appear to have little incentive to take actions that may avoid such high costs in the future. Avista has argued that the PCA mechanism does not allow the Commission to “apply[] ‘hindsight’ to power purchase ... decisions made by Avista to serve its customers.”⁴ Likewise, the PCA mechanism is inadequate to encourage the foresight necessary to avoid or reduce such inevitable costs in the future.

The Commission has the authority and obligation to apply greater scrutiny to Avista’s Colstrip-related expenses. As a regulated public utility in Idaho, Avista is subject to the limitation that its charges to the public must be “just and reasonable.”⁵ Further, Avista must provide and maintain service and facilities in a manner that is “efficient, just and reasonable.”⁶ This

² *Id.*, p. 3.

³ *In the Matter of NorthWestern Energy’s 2013-2014 Electricity Supply Tracker*, Montana PSC Docket Nos. D2013.5.33, D2014.5.46 (consolidated) Order No. 7283a.

⁴ *In the Matter of the Submission of the Status Report of Avista Corporation and Application for a Continuation of a Power Cost Adjustment (PCA) Surcharge*, Idaho PUC Docket No. AVU-E-02-06, Order No. 29130 at 22 (Oct. 11, 2002).

⁵ Idaho Code § 61-301.

⁶ *Id.* § 61-302.

Commission may not allow Avista to charge the public for expenses that fail to meet this standard.⁷

Consistent with these authorities, the Commission should initiate an investigation of the reasonableness and prudence of the costs associated with the extended outage of Colstrip Unit 4. Among other things, the Commission should consider whether Avista purchased the lowest-cost replacement power available; whether proper maintenance could have prevented the outage; and whether Colstrip is too costly and unreliable to satisfy Avista's obligation to provide and maintain service and facilities in a manner that is "efficient, just and reasonable."⁸ While we urge the Commission to initiate a new docket specifically to answer these questions, even in the context of this PCA, the Commission must at a minimum review the reasonableness of Avista's Colstrip-related expenses before it can approve Avista's 2014 PCA.

Engaging in a thorough prudence review of Avista's expenses associated with the Colstrip Unit 4 outage would be consistent with the practice of other utility commissions. For example, the Montana Public Service Commission is investigating whether NorthWestern Energy "prudently incurred" costs associated with the outage in the company's annual electricity supply tracker docket.⁹ Indeed, the Montana Commission expressly addressed the risk that "cost uncertainties related to [Colstrip Unit 4 (CU4)], such as coal cost increases, a future carbon tax, potential market price decreases, or CU4 maintenance and operation costs that exceed [NorthWestern's] estimates, will increase the cost to ratepayers of CU4 power over and above what [NorthWestern] has projected" when it authorized the inclusion of Colstrip Unit 4 in NorthWestern Energy's rate base in 2008.¹⁰ In response, the Commission committed to "conduct rigorous examinations in annual supply trackers of the prudence of [NorthWestern's] expenses related to CU4."¹¹ Avista's customers deserve no less.

While the Commission should not defer scrutiny of the high operating cost of Colstrip Unit 4, the need for such careful review will only grow as the expenses associated with the Colstrip facility escalate. Colstrip's owners—including Avista—are facing mounting liabilities due not only to the apparent failure of regular maintenance to avoid extended outages, but also due to significant and unaccounted for direct costs associated with future regulatory compliance. As summarized in the attached comments submitted by Sierra Club and MEIC in connection with Avista's Electric Integrated Resource Plan for 2013, Docket # AVU-E-13-07, Avista faces near-term costs to comply with obligations under the Regional Haze Program, the Mercury and Air Toxics Rule, the Clean Power Plan to regulate greenhouse gases from existing sources such as Colstrip, and other federal regulatory requirements.

⁷ See *id.* § 61-502 (requiring commission to fix rates when it finds that rates charged by public utility are "unjust, unreasonable, discriminatory or preferential, or in any wise in violation of any provision of law") *id.* § 61-503 (authorizing Commission to investigate rates and charges).

⁸ *Id.* § 61-302.

⁹ Mont. Code Ann. § 69-8-210(1); see *In the Matter of NorthWestern Energy's 2013-2014 Electricity Supply Tracker*, Montana PSC Docket Nos. D2013.5.33, D2014.5.46 (consolidated).

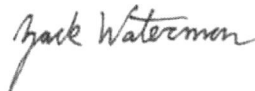
¹⁰ Montana PSC Docket No. D2008.6.69, Order 6925f, ¶ 227 (Nov. 13, 2008) (emphasis added).

¹¹ *Id.*

In addition to those concerns, Avista's customers face more risks. Colstrip's massive system of coal ash waste ponds presents enormous potential liabilities and direct costs for all of the Colstrip owners, including Avista. Colstrip owners frequently omit reference to the ever expanding plume of contaminated groundwater originating from the 800 acres of leaking coal ash waste ponds. The waste impoundment system has been contaminating groundwater since it was built. In 2012, the Montana Department of Environmental Quality (DEQ) issued an enforcement action to require cleanup of these impoundments. Currently an assessment of the extent of contamination at each of the three discreet waste disposal sites is underway. After the assessment is complete, the state will calculate and require a remediation bond and require cleanup of the site. While this one example is not at issue in this current PCA, it is evidence of the mounting financial liabilities for ratepayers. This PCA is just the beginning of new expenses for ratepayers from the unreliable and increasingly-expensive Colstrip plant.

In sum, the Commission should not reflexively approve Avista's request to foist the costs of operating the increasingly unreliable and expensive Colstrip plant on Idaho ratepayers. We urge the Commission to reject Avista's proposal to charge its customers for \$4.1 million in unauthorized expenses associated with Colstrip unless and until the Commission finds, based on a rigorous investigation, that Avista's costs were reasonable and prudently incurred.

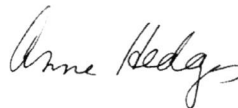
Respectfully submitted this 15th day of September 2014,



Zack Waterman
Executive Director
Idaho Chapter of the Sierra Club



Benjamin J Otto
Energy Associate
Idaho Conservation League



Anne Hedges
Deputy Director
Montana Environmental Information Center

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Attachment A

Sierra Club and Montana Environmental Information Center Comments on Avista 2013
Integrated Resource Plan



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IDaho PUBLIC UTILITY COMMISSION

November 12, 2013

Idaho Public Utility Commission
P.O. Box 83720
Boise, ID 83720-0074

Re: Comments on Avista's Electric Integrated Resource Plan for 2013, Docket # AVU-E-13-07

Dear Commissioners:

The Sierra Club and Montana Environmental Information Center (MEIC) submit these comments to the Idaho Public Utility Commission (PUC) to better inform your decision regarding Avista's 2013 Electric Integrated Resource Plan (IRP) of August 13, 2013.

Sierra Club is America's oldest and largest grassroots environmental organization. Sierra Club has 1.4 million members and supporters, with over 2,000 members in Idaho. Founded in 1892, the Sierra Club has been working for over a century to protect communities, wild places, and the planet itself. Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives.

MEIC is a 40-year strong environmental advocacy organization with members across the country, including Idaho. MEIC works to protect public health and the environment from air pollution, water pollution and climate change.

The Commission's Order No. 32888, dated September 10, 2013, notes that Avista states its preferred resource strategy provides a "least reasonable cost" portfolio that minimizes future costs and risks given actual or expected environmental constraints." We submit these comments on behalf of our members, particularly those in Montana and Idaho, to provide information to the Commission on the significant and increasing risks the Colstrip power plant (Colstrip) poses to public health and the environment, as well as Avista's ratepayers.

We believe Idaho ratepayers are at risk in two major ways as a result of Avista's Colstrip ownership interest.

1. Colstrip Units 3 & 4 are facing potentially significant and unaccounted for direct costs that would likely be passed on to Idaho ratepayers. See Regulatory Risks of Colstrip Ownership starting on page 4. Specifically see subsections entitled Regional Haze; Mercury and Air Toxics Rule; and Coal Costs and the Rosebud Mine.
2. All four Colstrip units are subject to overdue government regulation, citizen enforcement actions, and increased coal supply costs that could escalate costs for Idaho ratepayers. See Regulatory Risks of Colstrip Ownership on page 4. Specifically see subsections entitled Prevention of Significant Deterioration; Greenhouse Gases; National Ambient Air Quality Standards; Mercury and Air Toxics Rule; Coal Combustion Waste; and Coal Costs and the Rosebud Mine.

We do not believe these risks have been adequately disclosed or analyzed in Avista's 2013 Electric IRP, and would urge the Commission to require an analysis that explores the full breadth of liabilities and risks that the Colstrip plant currently poses to Avista's ratepayers.

Avista has a 15 percent ownership interest in Colstrip Units 3 and 4. This equates to a nameplate capacity of about 222-megawatts. Rising costs at all four Colstrip units could affect Idaho ratepayers directly and indirectly. As Colstrip ages, more upgrades, maintenance, modifications and expenditures are required. According to the ownership agreement for Units 3 & 4, Avista is a minority owner and is at an apparent disadvantage in decision-making. This issue could become more important if PPL or one of the other larger owners sells its interest to another entity or a majority of owners want to close one or more of the units.

Last year, news outlets reported that PPL Montana was attempting to sell all of its Montana generation assets. Those assets included 11 hydroelectric dams and two coal-fired power plants: Colstrip and Corette. On September 26, 2013, NorthWestern Energy, Montana's largest utility, announced an agreement to purchase PPL Montana's hydroelectric assets, but not PPL's coal assets. NorthWestern's CEO Bob Rowe said, "Hydro power provides a nice diversification and mitigates the risk of changing fuel prices and environmental regulations associated with coal." Mr Rowe's comment indicates that NorthWestern understands the risks posed by Colstrip and did not want to further expose its customers to those risks. It is important for the Idaho PUC to understand these risks as well.

As you know, the nation's energy market is engaged in a fundamental shift away from coal-based electricity resources. At the direction of the Nevada Legislature, NV Energy, Nevada's largest utility, is on a path to retire all of its coal generating resources. The Northeast is essentially coal free. The Canadian Province of Ontario announced plans to be coal-free by the end of 2014. And the only coal plants in Oregon and Washington are now slated to retire in 2020 and 2025, respectively. Most recently, the Oregon PUC issued very stern warnings to PacifiCorp for not including a sufficiently thorough assessment of liabilities associated with their coal plants.¹

¹ http://www.puc.state.or.us/Pages/meetings/pmemos/2013/2013_history.aspx

These examples and many more across the country underscore the remarkable change in the electric industry that continues to take place. Less than a decade ago, coal generated electricity accounted for 50 percent of our nation's electricity portfolio; in recent years that number has plummeted to below 40 percent.

This unprecedented trend away from coal generation stems in large part from the fact that this nation's existing coal fleet is antiquated and in need of expensive repairs. Colstrip is no exception. **In 2009, Colstrip Unit 4 had a forced outage that lasted more than 6 months and likely increased costs for Avista and other owners. Recently it was reported to the Montana Public Service Commission (PSC) that Unit 4 again went down unexpectedly, and is expected to be offline for repairs until early 2014.** These two long-term forced outages in four years undermine any argument that Colstrip is a reliable source of power. Both incidents occurred during high summer demand.

As organizations with thousands of members across the West, we urge the Commission to understand these trends and consider the true costs of the outdated, increasingly unreliable, highly polluting, and liability-laden Colstrip plant.

SPECIFIC CONCERNS REGARDING AVISTA'S 2013 ELECTRIC IRP

Avista's shift away from coal has been commendable. Its increasing reliance on efficiency is an indication that it values public health, the environment, and ratepayers. Unfortunately, Avista's 2013 Electric IRP is misguided in regard to Colstrip.

Colstrip Unit 4's lack of performance in recent years indicates Avista is using the wrong measurement to analyze its costs and the cost of replacement power. Avista appears to be analyzing Colstrip's output based on its nameplate capacity and then analyzing what would be needed to replace that capacity. **To accurately measure the cost of Colstrip's power versus the cost of a portfolio without Colstrip, Avista should be analyzing Colstrip on a megawatt-hour basis, not a potential or nameplate basis.**

Measuring Avista's interest in Colstrip's nameplate capacity would overestimate the replacement power needs in its planning scenario without Colstrip. As previously discussed, Colstrip Unit 4 is not currently operating and has not operated since early July. It is not expected to resume operations until early 2014. Colstrip Unit 4 experienced a similar lengthy outage in 2009. In 2011, a year in which Colstrip provided more reliable power, **Avista shows Colstrip providing 162 aMW or 1,416,000 megawatt hours (Appendix A, Technical Advisory Committee from November 7, 2012, p. 5).**

Despite lengthy forced outages at Unit 4 and Colstrip's 2011 output of 162 aMW, Avista's Preferred Resource Strategy analysis says Colstrip would need to be replaced by a combined cycle CT gas plant with a nameplate capacity of 270 MW, and provide 248 aMW. (Table 8.13, p. 8-26; and Appendix A, page 54) Avista's share of Colstrip's nameplate

capacity is 222 megawatts. It is unclear how Avista is calculating the actual replacement power costs should Colstrip no longer be in its portfolio. The IRP's charts appear to predict a need for far more energy than necessary to replace Avista's share of Colstrip's power.

Analyzing Colstrip's costs using actual megawatt hours instead of the inflated nameplate capacity would provide a more realistic cost analysis for planning future resource needs.

Avista's 2013 Electric IRP makes reference to the Washington State Utility and Transportation Commission IRP process (p. 8-26). Avista said in a 2011 IRP process, the UTC requested only two scenarios be measured with regard to Colstrip: without Colstrip and Colstrip with upgrades from potential environmental regulations. We believe this is a simplistic and outdated request from the UTC. Puget Sound Energy, which owns the largest share of Colstrip, was recently required to model additional scenarios for Colstrip. PSE submitted modeling to the UTC for a low cost, medium cost, high cost, and very high cost scenario for Colstrip. These modeling scenarios are far more useful for determining the costs and risks Colstrip may present to ratepayers. We recommend Avista conduct similar scenario models.

Appendix A contains the Technical Advisory Committee meeting presentations by Avista. The analysis presented by Avista at the November 7, 2012 meeting were flawed. The economic analysis referred to on page 4 only analyzed potential economic benefits for Montana. The report that is referenced failed to include analysis of any costs. In other words, this was not an economic analysis of Colstrip. It was a one-sided look at benefits with no consideration for impacts or costs.

REGULATORY RISKS OF COLSTRIP OWNERSHIP

EPA is in the process of finalizing and implementing longstanding Congressional directives related to pollution controls at large power plants. Many of these impending regulations will implement long-overdue requirements to protect public health, the environment, the economy, and property rights. These regulations will have significant impacts on the economics of outdated coal-fired electricity generation facilities. **In addition to federal regulations, Colstrip is also the subject of several pending citizen enforcement actions that could result in significant modernization and cleanup costs.** These regulatory and legal risks must be factored into the estimated cost to ratepayers.

I. Regional Haze

Sierra Club, MEIC, and the National Parks Conservation Association appealed EPA's regional haze decision for Colstrip. Avista's 2013 Electric IRP make no mention of the risks posed by our appeal even though it could cost Colstrip's owners over a hundred million dollars. We believe those risks should be disclosed and analyzed as part of the planning process.

Federal law requires a reduction in air pollution that affects some of our nation's most

treasured federal lands. The Clean Air Act's visibility-protection provisions, 42 U.S.C. § 7491, require states and the EPA to adopt plans to eliminate human caused haze from national parks and other protected federal lands, known as Class I areas. The plans must be designed to make reasonable progress toward eliminating human-caused haze pollution by imposing Best Available Retrofit Technology ("BART") pollution controls on some of the largest and oldest sources of haze-causing emissions. Regional haze regulations generally require installation of additional air pollution controls to reduce harmful emissions of nitrogen oxides, sulfur dioxide, and particulate matter.

Colstrip Units 1 and 2 are subject to BART requirements. Colstrip 3 and 4 are subject to reasonable progress requirements. In September 2013 EPA finalized its BART determination for Colstrip. EPA required no upgrades at Unit 3 and 4 even though it admitted regional haze requirements will not be met by the statutory deadline of 2064. EPA's plan for Units 1 and 2 requires reductions in SO₂ emissions to .08 lbs/MMBtu and NO_x emissions to .15 lbs/MMBtu.² These new lower NO_x emission limits will require the owners of Colstrip to install new air pollution control equipment. To reduce NO_x, Colstrip Units 1 and 2 must install combustion controls and Selective Non-catalytic Reduction (SNCR), at a combined estimated capital cost for both units of approximately \$27 million, and additional annual costs of approximately \$6.5 million. To reduce SO₂, Units 1 and 2 each must install a spare scrubber and conduct lime injection, for a combined estimated capital cost for both units of \$56 million, and additional annual costs exceeding \$8 million. The total capital costs of regional haze compliance for Units 1 and 2 is thus \$83 million, with an additional \$14.5 million each year. PPL's shares of Colstrip 1 and 2 is unregulated. PPL's power from these two units is sold into the market. BART compliance costs will likely be passed on to other utilities, like Avista, who purchase power on the open market.

The National Parks Conservation Association, along with MEIC and Sierra Club, believe that EPA's proposal did not go far enough. We appealed EPA's Colstrip decision to the 9th Circuit Court of Appeals. We are seeking to reduce emissions limits **on all four Colstrip units** beyond what the EPA proposed. We believe the record demonstrates that the installation of industry-standard pollution controls like Selective Catalytic Reduction (SCR) are cost-effective, demonstrated to be more effective at removing NO_x pollution than SNCR, and are required under the law. Over three hundred coal units across the country have already installed SCR technology, including a coal plant in Montana. According to EPA, SCR would have an approximate capital cost of \$156 million at Colstrip Units 1 and 2 and an approximate increased annual operation and maintenance cost of \$20 million.³ EPA did not even analyze the costs for Units 3 & 4. This appeal seeks to require additional pollution controls at Colstrip Units 3 and 4 under the reasonable progress program. We are now awaiting a decision by the Ninth Circuit Court of Appeals.

These potential costs are not currently but should be accounted for in Avista's IRP.

II. Greenhouse Gas Regulations

² 77 Fed. Reg. 57864.

³ 77 Fed. Reg. 23988

Coal-fired power plants are the largest industrial source of carbon dioxide emissions today. According to the U.S. Environmental Protection Agency's greenhouse gas database, which encompasses large emissions sources, Colstrip alone was responsible for about two-thirds of Montana's greenhouse gas emissions in 2011.⁴ Colstrip appears to be Avista's only coal-fired thermal resource. This places Avista at an advantage over other utilities that are more heavily reliant on coal-fired power. However, Avista's interest in Colstrip means it will not be immune from future carbon regulations and costs.

On June 25, 2013 President Obama delivered a speech about his plan to make the reduction of greenhouse gas emissions a centerpiece of his second term. He immediately followed this speech with a directive to EPA to move forward with regulating greenhouse gas emissions from new *and existing* power plants. In a memo issued to the Administrator of EPA, the President directed the agency to finalize regulations for greenhouse gas emission from existing power plants by June 1, 2015.

The Idaho PUC stated just two months ago that "it seems more likely than not that the EPA will move forward and enact additional regulations of fossil fuels under the federal Clean Air Act."⁵ Many western utilities are planning for some form of carbon regulation before 2018. **These utilities are planning for a carbon cost in the range of \$10-\$80/ton.** For example, the Northwest Power Planning and Conservation Council uses an average carbon cost of \$45 per ton. Many utilities rely on the Council's estimates to plan future resource needs. In California's initial carbon bidding for its cap-and-trade program, the cost of carbon was about \$10/ton, and most experts expect this price to rise. British Columbia has a \$30 per ton carbon tax. In addition, federal imposition of a revenue neutral carbon cost is quickly gaining momentum on both sides of the political spectrum, and could occur by 2018.⁶

Until a greenhouse gas regulation is finalized, the exact financial impacts to Colstrip are unknown. However, it is clear that Colstrip and other similar facilities will face significant costs in some form. Colstrip emitted 17 million tons of greenhouse gases in 2010 and about 14 million tons in 2011. **The Idaho PUC must require Avista to incorporate these financial risks by including a carbon price in future planning efforts.**

III. Prevention of Significant Deterioration Permitting

The Clean Air Act's Prevention of Significant Deterioration permitting program requires new and modified pollution sources that have the potential to degrade air quality to conduct an analysis prior to receiving a permit for proposed changes. The analysis is intended to verify that cost-effective pollution controls will be installed to protect against unnecessary degradation of air quality. In 2003 and again in 2012, the EPA requested

⁴ <http://ghgdata.epa.gov/>

⁵ Idaho PUC Order No 32890 at 12, (September 11, 2013).

⁶ <http://www.nationaljournal.com/magazine/the-coming-gop-civil-war-over-climate-change-20130509>

information from the Colstrip owners in investigations of potential violations of these permitting requirements. EPA and PPL resolved the initial request without providing the public with PPL's complete response. **EPA's investigation of the 2012 request into potential violations is ongoing.**

In April 2010 we requested a copy of PPL's response to EPA's 2003 request. After years of haggling, EPA finally agreed in April 2012 to release important documents to the public. PPL promptly sued EPA to keep that information secret. We are still awaiting the outcome of that court action.

Also in April 2012 the Billings Gazette published a newspaper article entitled, "Buzzing with Activity. \$70 million maintenance project brings upgrades to Colstrip plant. More than 500 workers busy refurbishing massive boiler in Unit 1." Shortly thereafter, EPA sent PPL an information request regarding the upgrades. After the article, we also began investigating these reported upgrades to determine if they were done in compliance with the permitting provisions of the Clean Air Act. **Our investigation uncovered what appeared to be a dozen instances in which all four Colstrip units have been upgraded without obtaining the necessary prevention of significant deterioration permits. In March 2013 we filed a citizen enforcement action in federal district court in Montana. A trial date has been set for November 2014.**

The outcome of this citizen initiated enforcement action could result in a requirement for the Colstrip owners to go through a permitting process and install modern air pollution control equipment at all four units. These potential costs must be accounted for in the planning process.

IV. National Ambient Air Quality Standards

National Ambient Air Quality Standards (NAAQS) generally impose ambient air quality standards for ozone, lead, particulate, sulfur dioxide, nitrogen dioxide and carbon monoxide. A NAAQS by itself does not require emissions reductions from a specific source. Instead emissions reductions from specific sources could be required if the source causes or contributes to an exceedance of an ambient standard.

EPA is required to regularly review and revise NAAQS based on current health-based scientific literature. It has done so recently for sulfur dioxide, particulates, oxides of nitrogen and ozone. If a source contributes to an exceedance of the standard, it could be required to install updated air pollution control equipment. As previously mentioned, updating air pollution control equipment for sulfur dioxide or nitrogen oxides could cost several million dollars to several hundred million dollars depending on the facility and the extent of the exceedance.

In 2010 EPA updated the NAAQS for sulfur dioxide. Sierra Club contracted with independent air pollution modelers to review Colstrip compliance with the new sulfur dioxide standard. That air dispersion modeling found that Colstrip's emissions likely

violate the one-hour sulfur dioxide NAAQS.^{7,8} Nonattainment status for a county requires those sources causing or contributing to the violation to decrease emissions by installing updated pollution controls or curtailing operations. As mentioned above, this cost could be significant.

The potential NAAQS violation near Colstrip place it under a significant risk of requiring additional sulfur dioxide pollution controls. Colstrip has already been ordered to meet lower sulfur dioxide emission limits as a result of EPA's BART determination mentioned above. However, EPA's BART decision was modest and only required reductions at Units 1 and 2. **Colstrip may have to meet far lower emission limits at all four units in order to comply with the new health-based sulfur dioxide NAAQS.**

Again, these potential costs must be accounted for in the planning process.

V. Mercury and Air Toxics Rule

Montana coal-fired power plants are required to control mercury under a state rule adopted in 2007. While all required facilities have been controlling mercury since January 1, 2010, the EPA's more recent Mercury and Air Toxics (MATs) rule is slightly different from the state rule in that it establishes emission limits from coal-fired power plants for ten non-mercury metals and acid gases in addition to mercury. The rule also establishes work practices to minimize creation of dioxin and furans. Sources could be required to control toxic emissions by installing updated air pollution equipment (i.e., scrubbers for acid gases and baghouses for metals). Generally, the compliance deadline for MATs will be 2015, with an opportunity for a one-year extension for facilities that demonstrate an inability to comply with MATs by the deadline notwithstanding diligent efforts. The units with the greatest potential compliance costs are unscrubbed coal units and those without baghouses. Because the rule does not allow trading, coal units that fail to comply must cease operation.

No Colstrip units have baghouses or modern sulfur dioxide controls. Colstrip must upgrade its technology to comply with MATs. Recent stack tests for Colstrip Units 1 and 2 demonstrate particulate emissions at or above the particulate MATs standard of 0.30 lb/MMBtu. While Colstrip is investigating whether upgrades to existing equipment may suffice, baghouses may be required. **PPL submitted an analysis of potential particulate control technologies to EPA that estimated annual costs of an ESP or baghouse at \$16-21 million for each unit.**⁹ Upfront capital costs would be much higher: Multiplying PPL's capital cost estimate at PPL's Corette plant by the four Colstrip units, shows the capital cost of baghouses at two Colstrip units could be \$76 million.

⁷ "Air Dispersion Modeling Analysis For Verifying Compliance with the One-Hour SO₂ and NO₂ NAAQS: PPL Montana - Colstrip Power Plant," Prepared by Camille Marie Sears, June 11, 2012

⁸ Memo to Jenny Harbine from Lindsey Sears, Colstrip SO₂ modeling, Sept. 21, 2012

⁹ PPL Montana, Best Available Retrofit Technology (BART) Assessment, Colstrip Generating Station (Aug. 2007).

Again, these potential costs must be accounted for in the planning process.

VI. Coal Combustion Waste

Colstrip has hundreds of acres of wet coal combustion waste surface impoundments. The State of Montana has acknowledged that Colstrip's impoundments have been leaking since they were built in the 1980's. **Contamination from these leaking impoundments has already resulted in multiple lawsuits in which Colstrip's owners paid neighboring landowners over \$25 million. The cost to actually remediate the hundreds of acres of leaking sludge impoundments will likely be far more expensive.**

In June 2010, EPA proposed two primary regulatory options for regulation of coal waste disposed of in landfills and/or surface impoundments: (1) regulation of the materials as hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act ("RCRA"); or (2) regulation of the materials as non-hazardous wastes under Subtitle D of RCRA. The proposed regulatory requirements of both options likely would lead to the accelerated closure of all existing unlined landfills and unlined wet surface impoundments, although the agency's "D Prime" option would allow for the continued use of existing landfills and surface impoundments through their useful life as long as certain environmental and safety standards were met. Under the two primary options being considered by EPA, coal waste disposal practices will be impacted significantly and likely result in significant compliance costs and/or may lead to the closure of existing disposal facilities. EPA's regulations will generally require groundwater monitoring, double lined landfills, closure of existing facilities, and possible conversion to dry ash disposal facilities, at a cost of several million dollars to several hundred million dollars at each coal plant.

EPA is expected to finalize the coal waste rule in 2014. Compliance deadlines are expected in the 2016-2018 timeframe. **Puget Sound Energy, a 1/3rd owner of Colstrip, already estimated the costs to comply with EPA's CCW regulations could exceed \$42 - 125 million.¹⁰ Until EPA finalizes this rule, the total cost of complying with the regulations at Colstrip remains uncertain.**

The State of Montana currently has jurisdiction over the regulation of Colstrip's waste disposal facilities under the Montana Major Facility Siting Act. In July 2012 the State entered into an Administrative Order on Consent (AOC) with the owners of Colstrip to address certain issues regarding coal ash disposal. **In cooperation with the National Wildlife Federation, our organizations brought a citizen-based enforcement action challenging the AOC as inadequate under Montana law. If successful, this litigation could require upgrades to Colstrip's waste impoundments and cleanup of contaminated groundwater. These long-known remediation risks and associated costs must be accounted for in the planning process.**

VII. Coal Costs and the Rosebud Mine

¹⁰ Puget Sound Energy's 2013 Integrated Resource Plan, Appendix J.

We believe there are fuel cost risks that have not been accounted for in Avista's IRP. Avista reported that it is currently negotiating a fuel supply extension for Colstrip.¹¹ We believe the results of this negotiation must be accounted for in this IRP in order to ensure that the costs and risks of Colstrip are accurately represented to ratepayers and the Commission.

As a mine-mouth operation, Colstrip relies entirely on coal from the adjacent Rosebud Mine. The Rosebud mine is currently owned and operated by Western Energy Company, a subsidiary of Westmoreland Coal. The Rosebud mine has produced coal for decades, and its costs are steadily increasing as the mine moves to new areas with larger volumes of overburden. **A recent industry report identified the Rosebud Mine as having the highest production costs for coal in the Powder River Basin, at \$16 per ton.¹² These increasing costs could be passed on to ratepayers through cost-plus contracts, which are set to expire in 2019.** During NorthWestern Energy's most recent IRP process, they identified the rising costs associated with the Rosebud mine, noting that the mine is experiencing an \$8/ton premium compared to base price forecasts. The cost of coal will likely increase further if and when the contracts are renegotiated with Western Energy for coal from the Rosebud Mine.

If the owners of Colstrip seek an alternative supply of coal, most likely from a different Powder River Basin mine, there will be additional costs associated with the permitting and construction of a rail unloading facility. The construction of such a facility would cost tens of millions of dollars. An alternative coal supply may also require boiler modifications and/or additional planned outages, as the Colstrip boilers were originally constructed to burn coal from the Rosebud coal seam (for example, Units 1-2 require coal with a relatively low sodium content).

The Rosebud Mine is also the subject of a recent citizen initiated civil enforcement action that could further increase the cost of coal to Colstrip. The enforcement action challenges the adequacy of the State of Montana's coal strip mining regulatory program in complying with the federal Surface Mining Control and Reclamation Act of 1977 (SMCRA). 30 U.S.C. §§ 1201-1328. Specifically, the enforcement action alleges that the Montana regulatory program has exhibited a pattern of failing to ensure that mining activity does not harm water quality or damage the hydrology of streams and groundwater in Montana, as required by SMCRA.

Conclusion

There are multi-million dollar costs and liabilities that loom for the nation's coal-fired electricity resources, including Colstrip. Avista's ratepayers could eventually be on the hook for many of these financial and environmental risks.

¹¹ Avista's 2013 Electric IRP, Appendix A, Technical Advisory Committee meeting, November 7, 2012, page 6

¹² Powder River Basin Coal Resource and Cost Study: Campbell, Converse and Sheridan Counties, Wyoming; Big Horn, Powder River, Rosebud and Treasure Counties Montana. Prepared for Xcel Energy by John T. Boyd Company. September 2011.

PPL apparently recognizes the risks associated with its coal assets. In September 2012, it announced it would "mothball" the Montana-based Corette plant. Pete Simonich, PPL Montana vice president and chief operating officer, stated in a news release, "[o]ur detailed analysis has shown that to meet the emission reductions required by EPA's mercury and air toxics standards, we would need to invest \$38 million in the Corette plant," and "[w]e simply cannot justify that level of spending in the current wholesale power market in the Northwest."¹³

NorthWestern Energy recognized the risks and apparently declined to purchase PPL's share of its coal generation facilities, and is instead attempting to exclusively purchase the hydroelectric assets.

Puget Sound Energy acknowledged the risks last year when its Vice President of Corporate Affairs, Andy Wappler, said, "[w]e know the end of coal is soon.... We know coal is a dead end."¹⁴

When NV Energy announced its plan to close its Nevada coal generation plants, its CEO said, "[w]e are looking at the future of Nevada's energy needs and saying that coal is not part of the long-term future of Nevada.... We think the costs are too great, the environmental concerns and the costs associated with those environmental concerns are too great... Coal is a fuel of the past in our state."¹⁵

The Colstrip plant is contaminating groundwater, emitting enormous amounts of air pollution, and is one of the nation's largest sources of greenhouse gas emissions. In light of the above-described risks, the Idaho PUC should work to protect consumers and the environment by ensuring that all of the above-described risks are included in the planning process.

Thank you for your careful consideration of the numerous legal and financial liabilities associated with the ownership of Colstrip.

Sincerely,



Zack Waterman
Sierra Club



Anne Hedges
Montana Environmental Information Center

¹³ Billing Gazette, September 20, 2012.

¹⁴ <http://www.youtube.com/watch?v=JHdS8OBPyhc&feature=youtu.be>. See minute 28:22.

¹⁵ Ralston Reports, 4/3/13, News 3 (NBC) Las Vegas